GM GENERAL MOTORS PRODUCTS

Products Review and SERVICE NEWS

VOL. 5—No. 6 DECEMBER, 1946

May Christmas Bells ring merrily ..... for You and Yours

CHEVROLET OLDSMOBILE CADILLAC PONTIAC BUICK GMC TRUCKS

A Yuletide Message

More people will drive home this Christmas than has been the case for several years. For we are a mobile nation and it will seem like old times for a great many Canadian families.

You, in the Automobile Industry, have played a leading part in the growth and development of our great country. You have learned much from the experience. The strength and stability which you have gained will serve you in good stead in the better days ahead.

We have much for which to be thankful. Just over the horizon is a very promising future. With a feeling of pride in our achievements, and confidence in the outlook, we shall welcome this Christmas time and stand hopefully at the gates of a bright New Year.

From the General Motors family everywhere, it is a grand privilege to extend to you all, our heartiest Season's Greeting.

E. J. Umpleby

DIRECTOR OF SALES

PRODUCT SERVICE Information

Products Review and SERVICE NEWS

VOL. 5, NO. 6 DECEMBER, 1946

Published in the interests of the Automotive Trade by

General Motors Products of Canada, Limited

OSHAWA, ONTARIO

To help you do a better servicing job we give you the following recently released information covering parts available and service tips. (Pages 119-124)

INCORRECT READING OF OIL GAUGE ROD

1946 Buick All Series

There has been some comment regarding the oil gauge rod, Fig. 1, on the above models being read incorrectly. In some instances the distance between the holes on the rod has been taken to represent one (1) quart of oil. As this distance actually represents approximately 1 pint, shown in Fig. 1, the addition of 1 quart would raise the oil level above the "Full" mark. This excessive oil is burned off rapidly, presenting a false oil consumption.

The holes were put in the oil gauge rod primarily to aid in determining the oil level and not to measure the amount necessary in refilling.

When checking the oil level, the engine should be allowed to stand with the ignition off, for a minimum of two minutes. This allows the oil to flow from the upper engine to the crankcase which will give a more accurate reading of the oil level.

The 1946 oil gauge rod is identically the same as the one used for 1942, therefore the date on the rod was not changed for 1946 production.

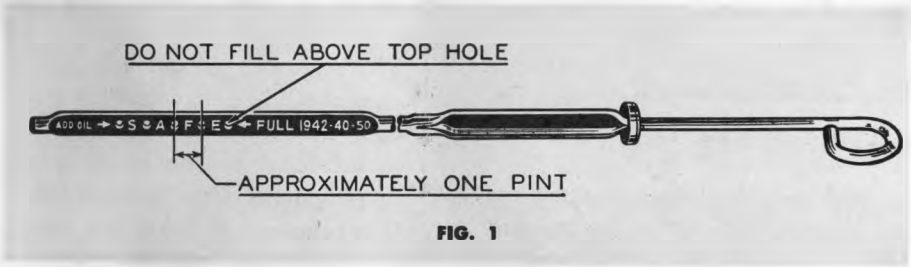


FIG. 1

HEATER AND DEFROSTER INSTALLATION KITS

1946 Passenger Cars, All Series
All 1946 Chevrolet and GMC Trucks

Some confusion may exist when installing the various kits on cars and trucks, due to duplication of certain parts and poor hose fits on the Defroster inlets when using the Master or DeLuxe heaters.

The following information will clarify this situation and outlines the contents of each kit and the application to the vehicles.

All Passenger Cars

Both Master and DeLuxe heater and defroster equipment is available for passenger cars.

Master Heater and Defroster Kits

Part No. 5808122—Master Heater Package—Contains heater wiring and switch.

Part No. 5831375—Heater Installation Package—Contains hose and fittings.

Part No. 5808301 — Defroster Package—Contains the defroster unit, two pieces of defroster hose and the left hand defroster inlet. These can only be used with the Master heater.

Some difficulty was experienced in assembling the right hand defroster inlet without removing the glove box. As a result the right hand inlet required for the Master heater was installed in Production on all cars and omitted from the installation kit No. 5808301. Due to other difficulties, both inlets were assembled in Oldsmobile cars.

Therefore, when installing the defroster package on Oldsmobile, it is necessary to discard the left hand inlet.

DeLuxe Heater and Defroster Kits

Part No. 5802580—DeLuxe Heater Package — Contains heater-defroster, wiring, switches, inlets, defroster hose, etc.

Part No. 5831375—Heater Installation Package—Contains hose and fittings.

Due to the defroster inlets and hoses being larger for DeLuxe defrosters, it is necessary to remove and discard the right hand defroster

inlet already installed on Pontiac and Chevrolet, and both inlets on Oldsmobile, as these are for use with the Master heater only.

Trucks

Only Master heater and defroster kits are released as follows for use on all truck models.

Part No. 5808122—Master Heater Package—Contains heater, wiring and switch.

Part No. 5831375—Heater Installation Package—Contains hose and fittings.

Part No. 5808301 — Defroster Package—Contains the defroster unit, two pieces of defroster hose and the left hand defroster inlet.

Part No. 3112122—Defroster Inlets (2 per truck)

When installing this material, it will be necessary to discard the left hand inlet provided in kit 5808301 and install the two inlets No. 3112122.

Defroster Inlet Identification and Fit

The right or left inlets can be identified by the letter "R" or "L" on the front of the inlet, Fig. 1.

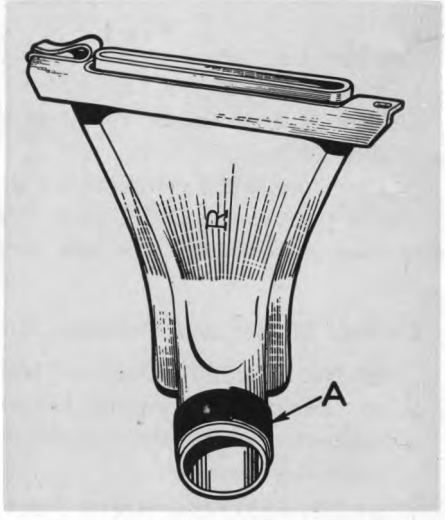


FIG. 1

Before installing any defroster inlets, it is advisable to check the fit of the defroster hose on the inlets. If the hose does not fit tight enough to eliminate the possibility of its slipping off, the opening can be expanded to give the required fit. As an alternative for inlets already installed, a piece of friction tape wound around the inlet, as shown at "A" Fig. 1, will provide a snug fit.

DISTRIBUTOR SHAFT LUBRICATION

1946 Buick All Series

In order to prevent premature wear or possible seizure of the distributor shaft, it should be properly lubricated at all times. It is common practice to force lubricant (wheel bearing grease) through the fitting, "A" Fig. 1, at the side of the housing "B" until the lubricant flows out the overflow hole "C" in the housing. In some cases a small amount of lubricant may flow from the hole even though the lubricant reservoir is not completely filled.

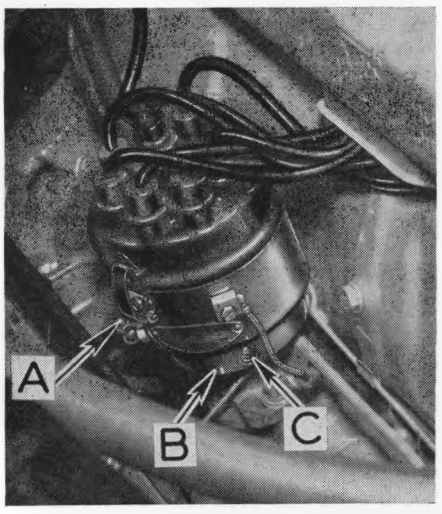


FIG. 1

This will occur if the overflow hole should be blocked with a small amount of lubricant which is forced out by the trapped air being expelled as the new lubricant enters the reservoir. To make certain that the reservoir is completely filled continue to force lubricant through the fitting until it flows out the overflow hole in a continuous stream.

REVISED SPARK PLUG TIGHTENING TORQUE

1946 Chevrolet Passenger Cars, All Series
1946 Trucks using 216 Engines

The torque specifications for tightening the M-8 spark plugs, Part No. 1559459, have been changed from 12-15 ft. lbs. to 10-12 ft. lbs.

It is very important that these plugs be tightened with a torque wrench to the specified tensions (10-12 ft. lbs.). Over-tightening will cause breakage of the spark plug shell at the base of the thread, or will cause distortion of the spark plug shell, which will lessen the clearance between the insulator and the inner part of the shell at one side. Distortion of the spark plug shell will generally cause missfiring between 45 and 60 miles per hour, under certain types of operating conditions.

New spark plug gaskets, either copper or steel, must be installed each time the spark plugs are removed, to ensure a good seal.

STEERING GEAR LUBRICATION

1946 Buick All Series

The steering gears on the above models should be inspected to make certain that the housings are filled with lubricant to the level of the filler plug hole. If additional lubricant is required or if for any reason the steering gear is disassembled, it should be refilled with "Steering Gear Lubricant". In cases where this is not available, the following grades of "All Purpose Gear Lubricant" for the temperature shown may be used.

Where the temperatures are consistently above -10°F, use S.A.E. 90.

Where temperatures drop below -10°F, use S.A.E. 80.

Note: When filling the housing do not use a pressure fitting in the filler plug hole, as this will force lubricant up the steering column.

ENGINE OIL PRESSURE LOW ON IDLE

1940-1946 Chevrolet Passenger Cars, All Models
1940-1946 All Chevrolet and GMC Trucks, Except 3 Ton

If the two oil distributor gaskets, "A" and "B" Fig. 1, are interchanged on the above models, it will result in low pressure registering on the gauge when the engine is idling.

The path of oil through the distributor is shown in Fig. 2, with the gaskets in their correct location. As can be seen, oil from the pump enters the oil distributor where it is directed into the main gallery to feed the main and camshaft bearings, also through the pipe "C" to the valve rocker arm shaft. It is applied against the oil distributor valve "D" and must build up to a pressure of 6 lbs. before the valve will open to allow oil to pass to the troughs in the oil pan. The gauge connected into the oil gallery registers the pressure in the system.

If gasket "B" is substituted for gasket "A", as shown in Fig. 3, oil by-passes the valve "D" and flows directly to the troughs in the oil pan. Thus there is no restriction to build up pressure in the system when the engine is idling and the oil gauge hand hardly moves off the pin.

When checking complaints of low oil pressure (indicator barely off pin) with the engine idling on new cars or rebuilt engines, check the oil distributor gaskets and make sure they are located as shown in Fig. 1.

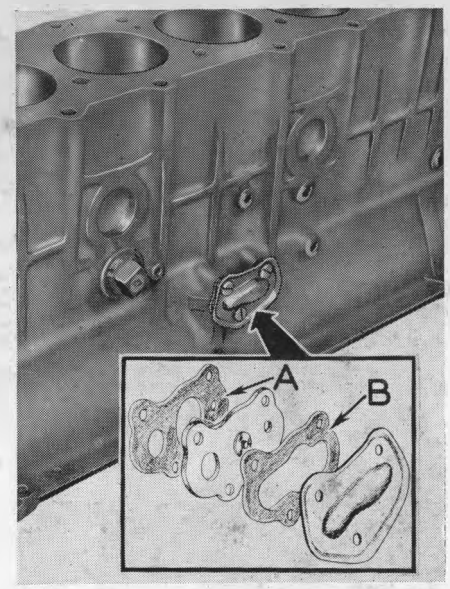


FIG. 1

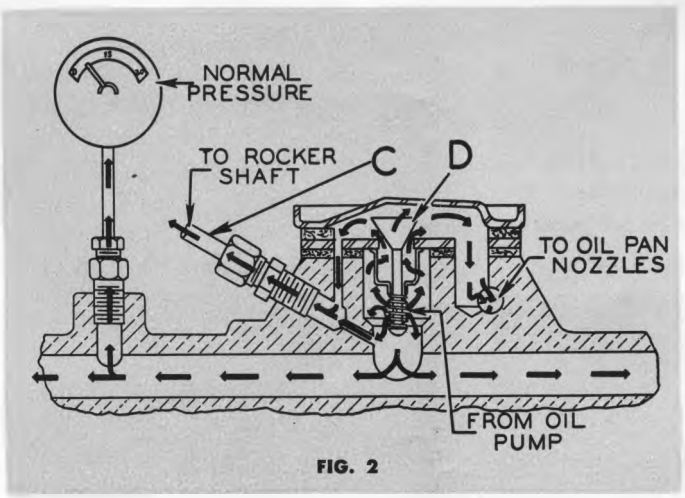


FIG. 2

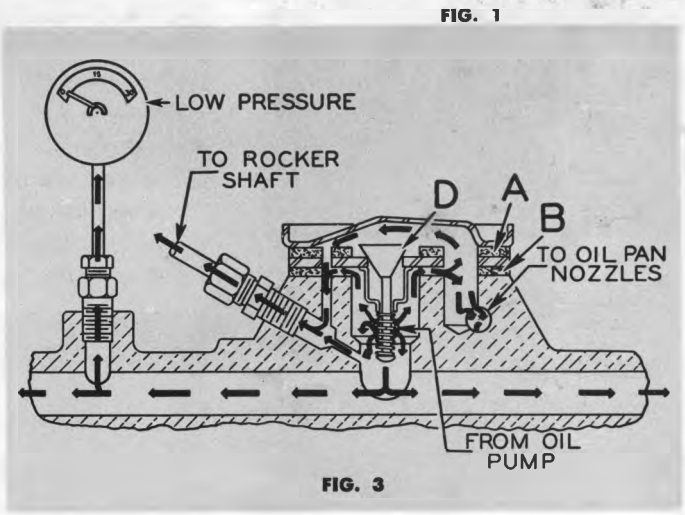


FIG. 3

KNEE ACTION LOWER CONTROL ARM SHAFT AND STEEL BUSHINGS RELEASED

Buick 1940-42 Series 42, 44, 45, 46, 47 and 1941-42 Series 49

The knee action lower control arm shaft, "A" Fig 1, has now been released for the models mentioned; also steel bushings "B" can be substituted for the original composition bushings. This will make it possible to service a large percentage of the lower control arms on these cars without the necessity of replacing the assembly. Complete lower control arm assemblies will still be

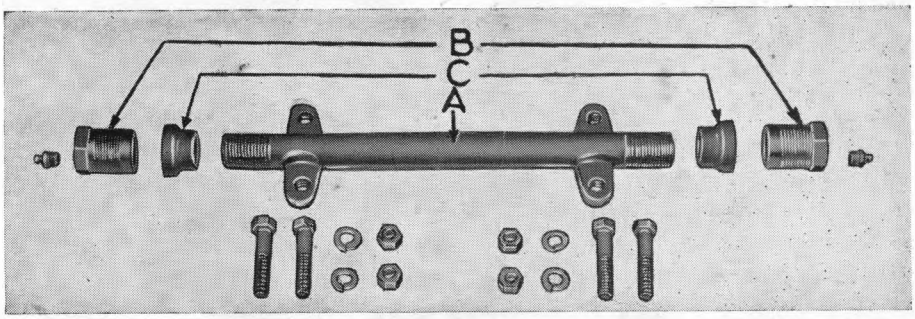


FIG. 1

available, however, under the same Part Numbers, to take care of cases where the control arms or spring seat are badly damaged due to the car having been in an accident.

Material—

Lower Control Arm Package No. 1393367 contains the parts necessary to service one lower control arm, and consists of the following:

Quantity	Parts No.	Description	Ref. Fig. 1
1	1328596	Shaft	"A"
2	1328595	Bushings	"B"
2	1328598	Seals	"C"
4	1328594	Bolts	
4	103027	Nuts	
4	103332	Washers	
2	109461	Lubrication Fittings	

REPLACEMENT OF THE REAR WHEELHOUSING

1941-42 All Model Passenger Cars

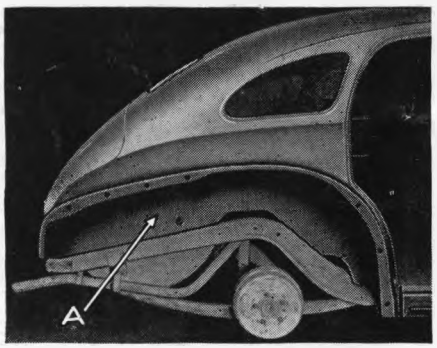


Fig. 1

Normally, when a rear wheelhousing, "A" Fig. 1, is damaged, the complete rear quarter side outer panel, shown in Fig. 2, has to be

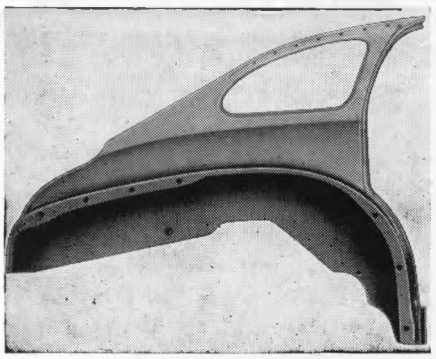


Fig. 2

replaced because the wheelhousing is not serviced separately.

Experience has proven that a damaged rear wheelhousing can be removed and only the wheelhouse section of a rear quarter panel installed. This prevents disturbing the upper section of the rear quarter panel resulting in considerable saving. Rear quarter panels are available through GM dealers.

Replacement can be completed as follows:—

Removal—

1. Raise the complete car off the floor and place on blocks so that the under-body is on an even plane, Fig. 3.

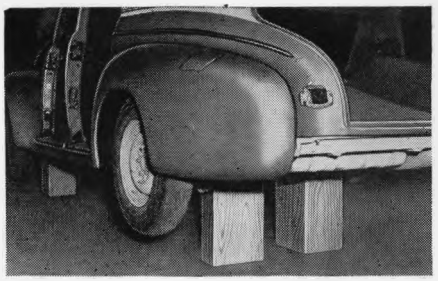


Fig. 3

2. Remove the following:—
   (a) The rear wheel and rear fender on the damaged side.
   (b) The rear trunk lid.
   (c) The tail light assembly on the damaged side.
   (d) The rear seat cushion and seat back.
   (e) The rear bumper and gravel deflector.
   (f) The rear quarter lower trim including the window garnish moulding, the inside handles and the windhose on the rear lock pillar.
   (g) The trunk side wall trim, the trunk floor carpet, the spare tire and the parts inside of the trunk that may interfere with the repair.
3. With a welding torch, clean off the solder from the original weld "D" Fig. 4, then saw through this weld.

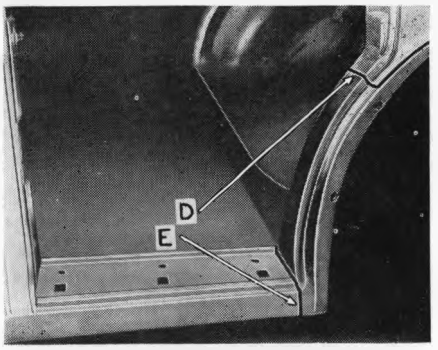


FIG. 4

Note:—Be careful not to cut the rubber drain tubing located inside this part.

4. Saw the end of the rocker panel and the floor pan at "E" Fig. 4.
5. On the inside of the body, cut the rear seat riser where it is spot welded at "F" Fig. 5.

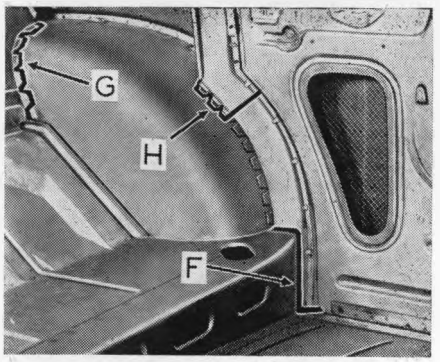


FIG. 5

6. Break loose the spot welds at "G" and "H" Fig. 5.
7. On the outside of the body, cut along the curved edge of the wheelhouse, "J" Fig. 6, from the rear door opening to the lower rear corner of the trunk. Confine the cut to the creased or curved edge of this panel without any wavering or running off

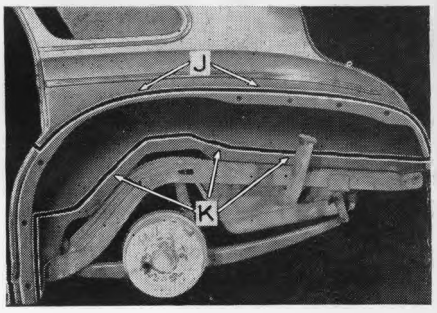


FIG. 6

the mark. This is important; otherwise the replacement wheelhouse may not fit properly. The use of a hack saw or metal cutting tool is recommended for this operation.

8. As the final operation in the removal of the panel it is not necessary to cut the lower skirt of the wheelhouse exactly at the edge of the floor pan. It may be cut 2½" or 3" above the edge of the floor so as to provide a convenient strip "K" Fig. 6 for attaching the replacement panel.

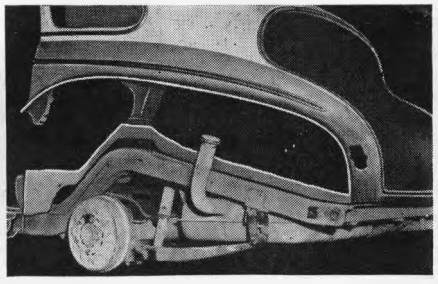


FIG. 7

9. Fig. 7 shows an exterior view of the body after the wheelhouse is removed and Fig. 8 an interior view.

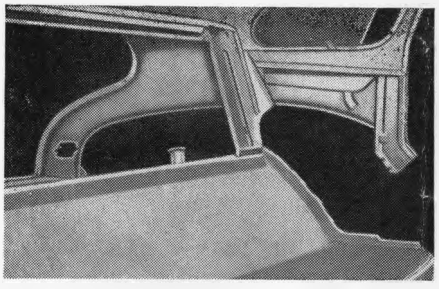


FIG. 8

Removing the Wheelhouse from a New Rear Quarter Panel—

In removing the wheelhouse section from the new rear quarter panel, only two cuts are necessary:—first along the curved edge of the wheelhouse, as explained in Operation 7 on page 122, and then across the upper face of the dog leg, Operation 3. These cuts must be exact.

The lower skirt of the replacement wheelhouse is not cut away but simply laps against the "left over" flange of the old wheelhouse, "K" Fig. 6.

After cutting, thoroughly clean the black protective coating off the panel. Use gasoline, oleum spirits or turpentine.

Installation of New Wheelhouse—

1. Place the new wheelhouse in the body opening. Fig. 9, and

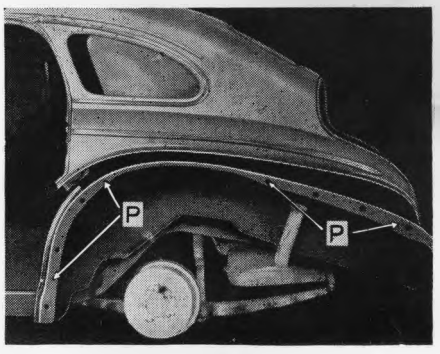


FIG. 9

trim or file the sheet metal, as necessary, to obtain a proper fit.

2. Position the wheelhouse in place and hold at the bottom with vise grip pliers or clamps, "L" Fig. 10.

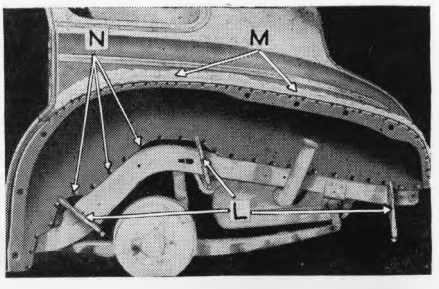


FIG. 10

3. Place the rear fender temporarily in position, also close the rear door and check the alignment. Remove the rear fender.
4. With the wheelhouse in its correct position, mix up powdered wet asbestos and apply it liberally across the painted surface of the rear quarter panel just above the wheelhouse, "M" Fig. 10. This will help prevent damage to the painted surface and also localize the heat during welding operations.
5. Using a Number One or Two torch tip, tack weld the wheelhouse to the rear quarter panel at four or five places from front to rear along "J," Fig. 6.

   Note:—During the tack welding operation the edges of either panel may have a tendency to buckle slightly. A helper using a pry bar may be needed on the inside of the car to steady the metal as each tack weld is made.
6. Tack weld to the rear quarter panel and the lower end to the rocker panel, "D" and "E" Fig. 4. Again place the rear fender in position, also close the rear door and check alignment. Remove the fender.
7. Continue with the above tack welding operations until the welded spots are spaced approximately one inch apart across the panel.
8. Weld continuously along "J" Fig. 6 for a distance of approximately 10 or 12 inches, then, to allow for the dissipation of heat, skip a section and carry on intermittently in this manner towards front or rear. Finally go back over the panel and weld in the omitted areas until a continuous weld has been made from front to rear.
9. Weld across "D" and "E" Fig. 4.
10. From inside the trunk, tack weld the lower skirt of the wheelhouse to the strip, "K"

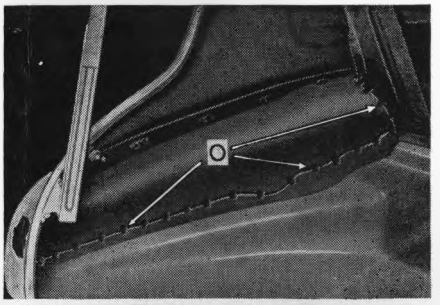


FIG. 11

Fig. 6. Tack welds are placed approximately one inch apart, "O" Fig. 11. A continuous or finish weld at points inside the body is not necessary.

11. Tack welding operations on the inside of the body may be completed at "F", "G" and "H" Fig. 5.
12. On the outside of the body, tack weld the lower skirt of the wheelhouse to the strip "K," Fig. 6, as shown at "N," Fig. 10.
13. Solder fill and metal finish all welds, then paint in the regular manner.
14. Apply deadener coating No. 5267272, with a brush, to the complete outer surface of the wheelhouse, working it well into all seams and overlapping surfaces. Make sure the deadener coating is also applied to the outer edge of the wheelhouse, "P" Fig. 9, taking care that it does not contact the threaded part of the anchor nut. Coat the wheelhouse with deadener on the inside of the body, as shown in Fig. 12, and also the section inside the trunk, Fig. 13.
15. Re-install the fender and other parts removed to complete this operation.

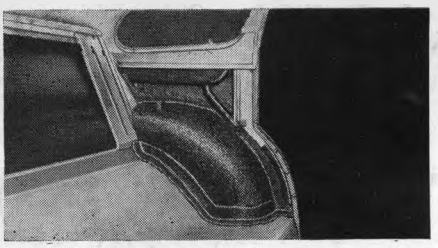


FIG. 12

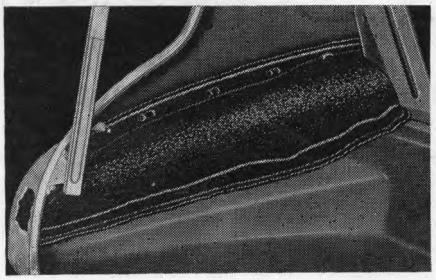


FIG. 13

IGNITION DISTRIBUTOR AND OIL PUMP SHAFT ALIGNMENT

1940-1946 Chevrolet 1000—1200 Series;
1940 Pontiac 2200—2200S Series;
1940-1946 ½, ¾, 1, 1½, 2, 2 C.O.E. and 2½ Ton Trucks

Misalignment between the ignition distributor shaft, "A" Fig. 1, and the oil pump shaft "B" may result in the seizure of one or both of these shafts, causing the distributor gear pin "C" to shear. This could occur after the oil pump had been removed and re-installed for any reason.

Where difficulty is experienced with either the distributor or the oil pump shaft seizing, the alignment between the two assemblies can be checked as follows:—

1. Remove the camshaft.
2. Install the ignition distributor and the oil pump retaining screw "D". Do not connect the oil line "E".
3. Remove the distributor cap "F" and rotate the distributor shaft to see that there is no binding of the distributor or oil pump shafts. If the shafts bind, remove the distributor and reduce the diameter of that part of the distributor shaft located between the drive gear and the drive tang approximately .003" (standard shaft diameter .4895" — .4900") as referred to in Fig. 1, then reassemble and re-check for free rotation.
4. Install a new delivery pipe "E" No. 839203 along with new coupling sleeves "G" No. 120430 and nuts "H" No. 140290.

   Caution:—A new oil delivery pipe is necessary as the dimension between the pump outlet and the connection at the cylinder block will vary on different jobs.

   The coupling sleeves being free on the new delivery pipe, the dimension between the coupling nuts may be varied as necessary. When the coupling nuts are tightened, the coupling sleeves then clamp on the pipe to set the distance between the coupling nuts for that particular job.
5. Re-check to make sure that the distributor and pump shafts are free.
6. Remove the distributor, re-install the camshaft and complete the re-assembly of the engine.

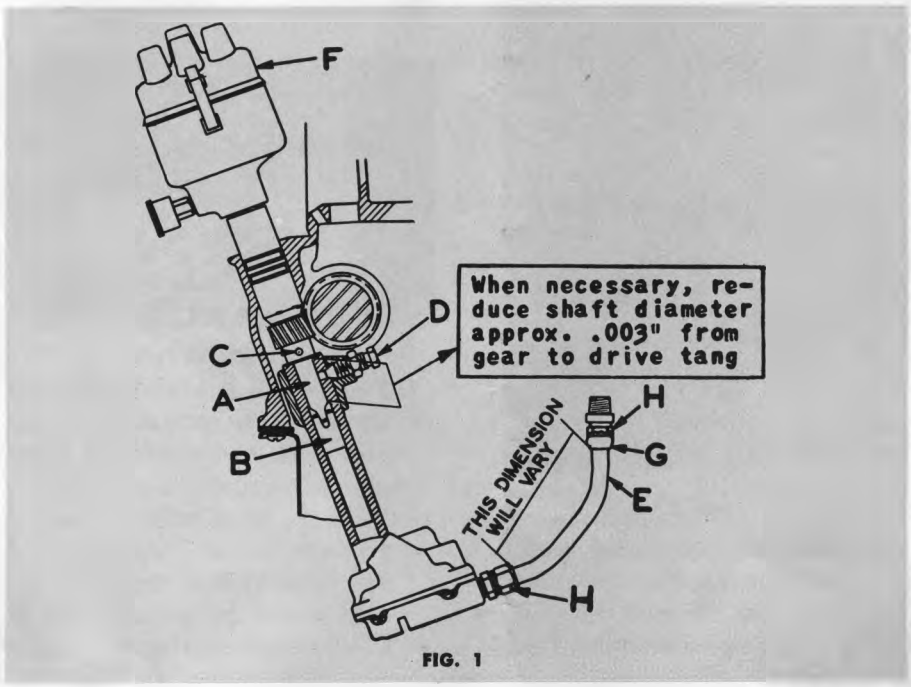
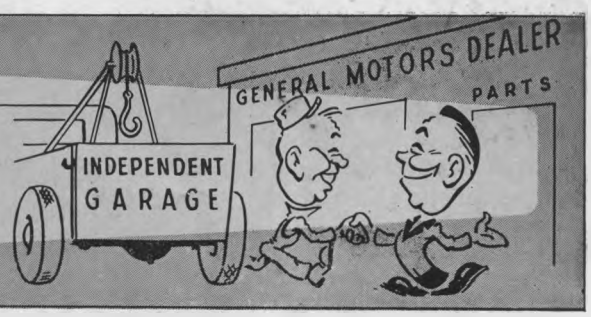


FIG. 1

Meet your friendly GENERAL MOTORS DEALER



Chevrolet Motor Sales Company of Montreal Limited

Mr. Art Renaud, Service Manager, and Mr. J. A. Martineau, Parts Manager of this dealership, invite garage operators to come to them with their parts and service problems. This is just one of the many GM Dealerships in the Montreal area who are equipped and anxious to serve you.

Inman Motors Limited Winnipeg, Man.

The above photo shows the portion of Inman Motors' attractive and efficient Parts Department which is visible from the showroom floor. This is one of five up-to-date General Motors dealerships in the City of Winnipeg serving the garage trade.

Mr. Cecil Swatland is the Service Manager and Mr. Gilbert Lear is the Parts Manager.

These are just a few of the many dealerships across Canada who are trained and ready to serve you.

General Auto Sales Ltd., Nanaimo, B. C.

Representing Chevrolet and Oldsmobile cars and Chevrolet trucks in Nanaimo, this dealership is well known to the garage trade in the district, having represented General Motors since 1923.

Rossignol Motor Sales Ltd., Liverpool, N.S.

Mr. Charles Rafuse, Manager of the modern Parts Department illustrated above, invites members of the garage trade in the area of Liverpool, N.S., to call on him for their GM Parts and Accessories. If it's a service problem see Mr. Graham Young the Service Manager.

Grieve Motors Limited Toronto, Ontario

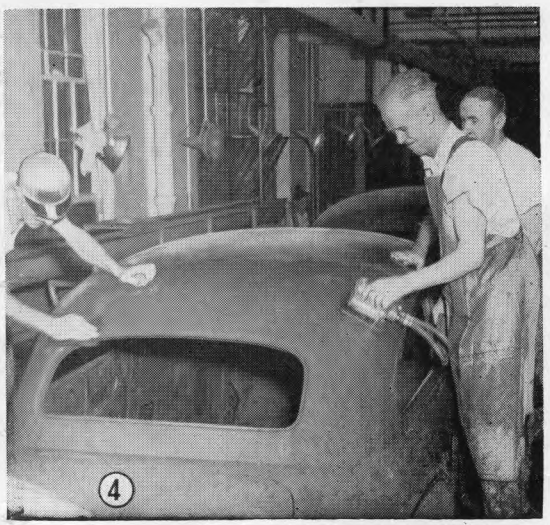
Seen behind the counter of this recently modernized Parts Department are Mr. Chris Holmes (right), Parts Manager, and Mr. Ken Harrington, Parts Clerk. Ask for Mr. Ref Reid, Service Manager, if you need help from a service angle. This is one of twelve GM Dealerships in the City of Toronto who are serving the garage trade.

PAINTING BODIES AT GENERAL MOTORS OSHAWA PLANT

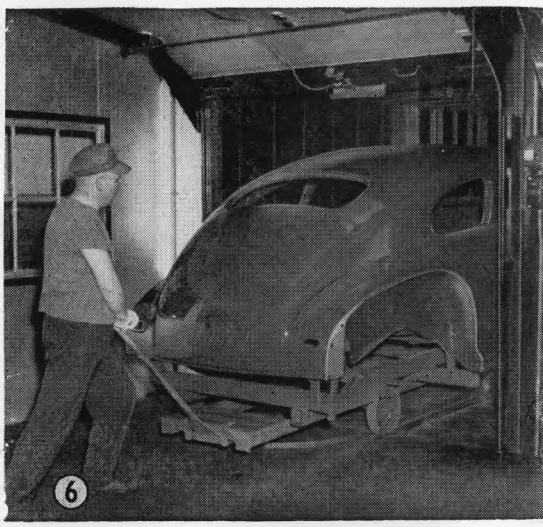
The Second in a Series of Articles on Manufacturing Operations

In our last issue we described the building of the "body in white". Before any paint is applied, the bodies are thoroughly cleaned with petroleum spirits as shown in Figure 1, to remove any grease. They are then moved through the tunnel shown in the background of Figure 1 where they are first automatically washed in hot water, then receive a chemical treatment called "bonderizing" to prevent the formation of rust under the paint.

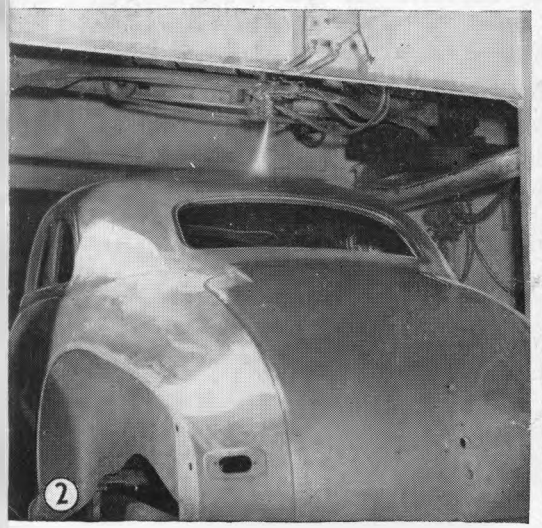
Cleaning bodies prior to painting, automatic washing tunnel shown in background.



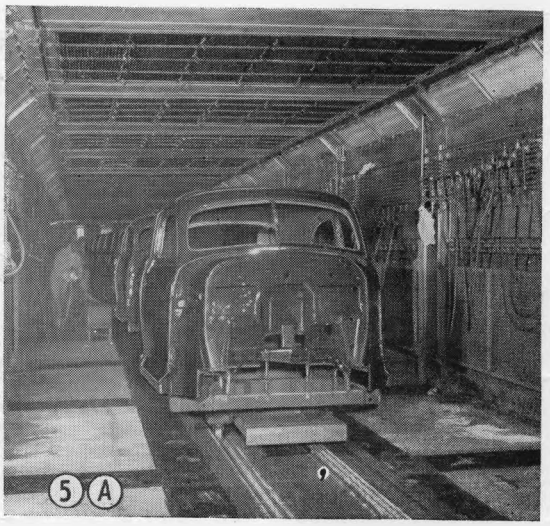
Machine and hand sanding of bodies in preparation for finish coat.



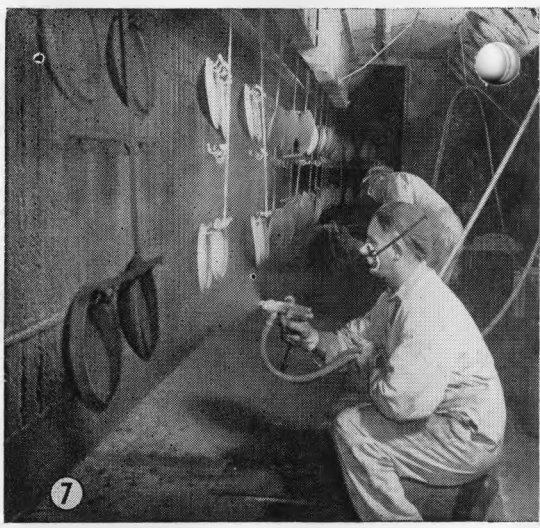
Body entering baking oven through which it travels for one hour at a temperature of 260°F.



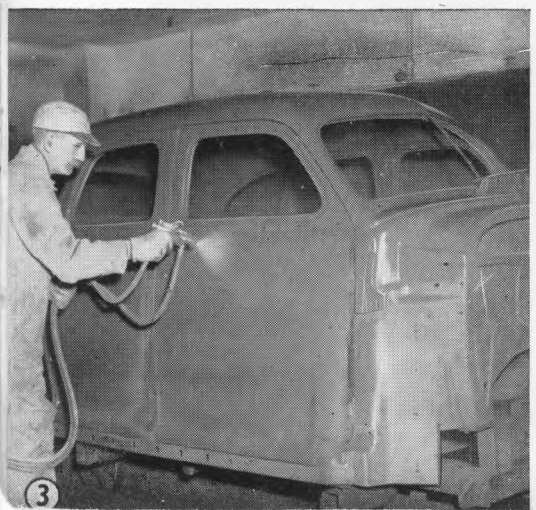
Automatic paint spray for roof panels shown above. Hand spraying of rest of body shown below.

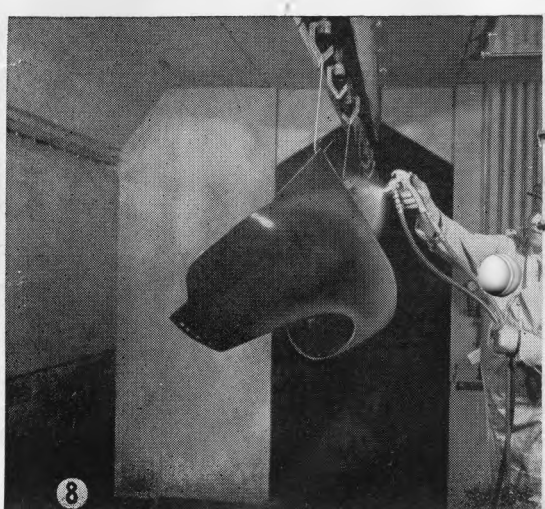


Paint is mixed in room shown below and is pumped through pipes to spray booth shown above.



Old style paint spray booths as shown above have been replaced by new "water wash" booths as illustrated below.





The bodies are then ready for the first coat of paint which is an oil primer. Figure 2 shows the automatic spraying of the roof panel. The remainder of the body is sprayed by hand. All soldered areas are then glazed with a special putty to fill any small pits or file marks. After sanding this putty, a coat of "surfacer" is applied as shown in Figure 3, which acts as a base for the final coats of Dulux.

After baking this coat, the entire body is sanded. The men shown in Figure 4, are machine sanding the roof panel. A rigid inspection follows this operation and any thin or rough spots are repaired.

The bodies are now ready for their Dulux coats in colour. The Dulux is mixed in a special mixing-room below the spray tunnel booth and the various colours are pumped to the booth through pipes, as shown in Figures 5A and 5B. After the Dulux has been applied the bodies are started through a baking oven as shown in Figure 6, through which they travel for one hour at 260°F. Upon emerging from this oven, the Dulux is sanded and the operation repeated, making a total of two separately baked finished coats. Bodies that are rejected upon inspection are given a third coat of Dulux.

New Spray Booths Increase Efficiency

All paint spray operations are now performed in "water wash" booths. An old style booth is shown in Figure 7 in which the air is cleaned by fans only. Figure 8 shows a "water wash" booth in which the absence of paint spray in the air and on the walls will be noted.

In the next issue we shall describe the body trim and hardware operations which follow the painting.

GM Indestructible Screw Drivers

Screw drivers have one thousand and one practical uses around the home or shop. GM Screwdrivers come in an assortment of every possible size and shape ranging from the small vest pocket size to the very biggest style. With shock-proof amber handles and the finest tempered steel blades GM Screw Drivers are "tough to beat."

Ruglyde Rubber Lubricant

RUGLYDE is a long lived and safe lubricant for use on various rubber parts of the car such as rubber shackles, snubber and stabilizer linkage, grommets, insulator strips, pads or any other rubber fittings. Since it is a penetfating lubricant it will stop squeaks, and preserve the rubber.

Another important feature is the fact that it is entirely harmless to rubber parts and car finishes. This handy lubricant should always be kept on hand and can be purchased from your GM Dealer.

5262285 — 8 oz. dispenser.

A Tribute To Original Parts

This 1915 model McLaughlin Buick, according to its owner Mr. Ben Long of Batawa, has been with the Long family for 20 years and still has all the original parts except the carburetor and one axle. It is shown above parked beside a 1946 model in front of Ontario Motor Sales, Oshawa. The 31-year-old car is still in daily service which testifies to the stamina of Genuine Parts. It also bears out an old McLaughlin Buick slogan which was well known in 1915 — "one grade only and that the best".

Coffee Time at Mills Motors Limited, Edmonton, Alta.

Realizing that a man doesn't do his best work on an empty stomach, the Cadillac dealer at Edmonton, decided to do something about it. While employees can slip out for their snacks, this disrupts a business organization so Frank Mills decided to "bring the mountain to Mohammed" as the saying goes.

The result was that the coffee counter shown above was set up right on the premises. Now the employees can have their snack at ten in the morning and three in the afternoon at two-thirds the cost of the food outside and the quality is the best.

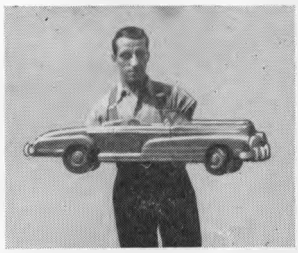
Our Edmonton readers will no doubt recognize some of the men in the above photo. Mr. Frank Mills is seen behind the canteen counter at "coffee time".

FROM HERE AND THERE

A collection of items on many subjects of interest to Garage Operators . . . items gathered from here and there.

Model Buick Car Built by Employee Of Automobiles Inc., Quebec City

Raoul Potvin of 94 Marie Louise Street in Quebec City, has proven that he is just as accomplished in the use of a knife as he is with a spray gun in the body shop of the GM dealership where he is employed.



When the Fisher Body Service School was in the Quebec capital recently, the instructors were amazed at the workmanship of the model which Mr. Potvin is shown holding in the above photograph. It is almost entirely built of wood and is complete in every respect. The tires, wheels and hub caps are perfectly carved. The hood, doors and trunk lid are fitted with locks and hinges which can be operated. The knee action units have been accurately constructed and the body is upholstered and painted comparable to the full scale 1942 Buick convertible coupe of which it is a copy. The model was completed in 75 hours' time.

GM Display Featured At International Plowing Match

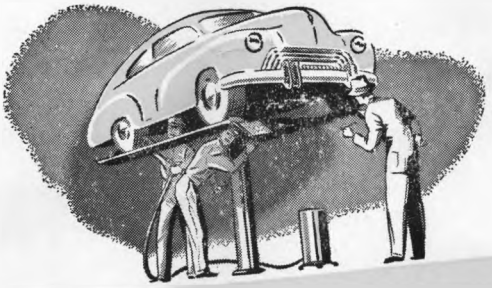
The International Plowing Match and farm machinery demonstration, held at the Port Albert Airfield near Goderich recently, was the scene of the large General Motors display illustrated here. The GM "showroom" was in one of four hangars which housed close to 125 exhibits of farm machinery and allied lines.

The General Motors display took on the atmosphere of a dealer's showroom with an abundance of flowers. Comfortable chairs and sofas were located close to the vehicles on display.

"While the iron is hot!"

CHECK THE HEAT RANGE OF ALL PLUGS

When you're doing a Lubrication Job



Here *is* an opportunity! Better gas, longer mileages, and normal driving speeds call for a "cooler" type of improved AC Spark Plugs. Plugs of a Heat Range that did a job in the days of lower octane gas and slower driving are too "hot" today. They are likely to split, blister, misfire, and cause preignition.

There are millions of these "wrong Heat Range" plugs still in use. Plenty are in your neighborhood. GET 'EM OUT! *You'll sell new plugs!*

Check the Heat Range of *all* plugs on every car, truck, bus, and tractor that comes in for *any* kind of service. Check it against the AC Specification Chart—*and be sure.*

ALWAYS CHECK HEAT RANGE

- ★ When you LUBRICATE
- ★ When you CHANGE OIL
- ★ When you give a WASH
- ★ When you TUNE UP and REPAIR
- ★ When you SERVICE A BATTERY
- ★ When you CHANGE OIL FILTERS

Other Well-Known Lines of UNITED MOTORS SERVICE

NEW DEPARTURE *Ball Bearings* • HARRISON *Thermostats* • AC *Fuel Pumps, Gauges and Speedometers* • AC *Oil Filters* • DELCO-REMY *Starting, Lighting, Ignition* • HYATT *Roller Bearings* • HARRISON *Radiators* • KLAXON *Horns* • DELCO *Shock Absorbers* • PACKARD *Cable* • GUIDE *Lamps* • DELCO *Hydraulic Brakes*

AVAILABLE FROM YOUR WHOLESALER

AC SPARK PLUGS

MADE IN CANADA

T1146-AC

UNITED MOTORS SERVICE DIVISION OF GENERAL MOTORS PRODUCTS OF CANADA, LIMITED, OSHAWA, ONT.

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GET THEM FROM THE GENERAL MOTORS DEALER

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YOU'RE PLAYING SAFE with customer satisfaction when you take this tip — use *Factory-Approved GM Parts and Accessories for every replacement job!* Identical with original equipment, they fit like a glove . . . they're thoroughly dependable . . . and they're backed by GM integrity.

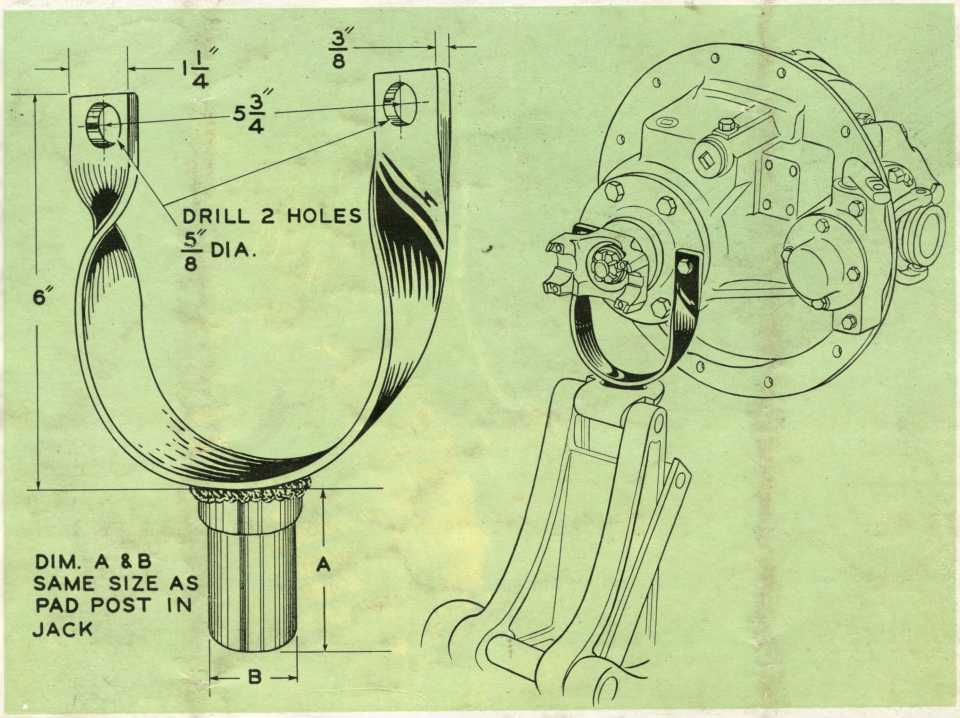
And always get Factory-Approved GM Parts from your General Motors Dealer! He's ready to give you prompt service, backed by a nation-wide system of GM Parts Depots, carrying the most complete stocks in Canada.

Make this sure bet! Select Factory-Approved GM Parts and Accessories every time . . . and order from your General Motors Dealer!

T46-PA1

PARTS
AND ACCESSORIES
• CADILLAC • CHEVROLET and GMC TRUCKS

IDEA OF THE MONTH



$10 IS AWARDED

Leo Lemire
The Oliver Blais Company Ltd.
Kirkland Lake, Ont.

This month's prize winner suggests a method of replacing D.P. Axles in trucks which eliminates much of the heavy lifting which is ordinarily required.

Material Required:

1 piece—Cold Rolled Steel 1¼" x ⅜" x 18"

1 piece—Round Steel same size as the Pad Post on the Hydraulic Jack to be used.

How to Make Up:

1. Bend the piece of flat steel to the shape and dimensions shown in the illustration.
2. Drill attaching bolt holes as shown.
3. Make up a post to the same dimensions as the Jack Pad Post on your Hydraulic Shop Jack.
4. Weld the U-shaped portion to the post.

The dimensions shown on the above illustration are correct for the Eaton D.P. Axle. For other makes of axles it will be necessary to check the dimensions against an actual assembly.

How to Use:

The fixture is bolted to the pinion flange of the differential carrier assembly and the post inserted in the jack in place of the standard lifting pad. The jack can then be rolled under the truck in front of a rear wheel and adjusted to the point where the carrier bolts can be removed or installed.

YOU CAN WIN AN AWARD, TOO!

You may be next winner if you submit to us your ideas on—

(1) Time Saving Methods (How to do the job faster);
(2) Time Saving Tools (Tools you have developed);

Send them to:

SERVICE DEVELOPMENT DIVISION

General Motors Products of Canada, Limited, Oshawa, Ontario